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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,177	10/28/2003	Richard N. Anderson	HUN.233	4293

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EXAMINER

DANIELS, MATTHEW J

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,177

Applicant(s)

ANDERSON, RICHARD N.

Examiner

Matthew J. Daniels

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1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 10-13 is withdrawn in view of the newly discovered reference(s) shown below. Rejections based on the newly cited reference(s) follow.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “said leg widens adjacent said top surface of said core piece” of Claim 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. **Claims 5 and 6** are objected to because of the following informalities: The claims recite “formed by” but a structural limitation to the shape of the article follows, which are not a forming methods.

Claim Rejections - 35 USC § 112

4. **Claims 1-9** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no disclosure of “downwardly” in the specification as originally filed. This limitation requires a particular relative orientation which is not supported by the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim rejections set forth previously are withdrawn in favor of the following rejections.

6. **Claims 1, 9, 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis (USPN 4615163) in view of Pettersson (USPN 4095913). **As to Claim 1**, Curtis teaches the well known aspects for making a composite profile, namely providing a core piece and insert, each having the same profile from end to end, wherein the core pieces defines a channel sized to receive the insert piece, the channel extending to both ends, inserting the insert piece downwardly into the channel with the top of the insert initially above the top surface of the core, and pressing the insert downwardly into the channel such that the surfaces of the insert and core are aligned (Figs. 3 and 4 and 3:40-4:40).

Curtis is silent to the crush ribs, but Pettersson teaches this aspect of the invention (Fig. 6 and 3:12-36). In particular, Pettersson teaches fiberboard and wood (4:10-15). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Pettersson into that of Curtis in order to allow expansion and contraction of the composite board. **As to Claim 9**, Curtis' article has the at least one leg (area on either side of insert in Fig. 2), the insert piece defines on side surface (Fig. 3), and Curtis clearly teaches an adhesive being applied to one or both of the leg and insert (3:55-65). **As to Claim 10**, Curtis teaches the well known aspects for making a composite profile, namely providing a core piece and insert, each having top and bottom surfaces, wherein the core pieces defines a channel sized to receive the insert piece (Figs. 2-4), pressing the insert piece into the channel to align the top surfaces (implicit in that the insert is placed), wherein the first channel defines at least one leg (areas beside insert 12 in Figs. 2-4) and the insert defines at least one side surface (Fig. 4), applying adhesive to at least one of the leg and side surface prior to pressing the

pieces together (implicit), wherein the bottom surface of the core piece defines at least one shallow pocket to act as a repository for any extra adhesive applied (Figs. 2-8). In each Figure, Curtis' insert "defines" the repository, but particularly in Figs. 5-8 the insert is interpreted as defining the repository in substantially the same way shown in this application.

Curtis is silent to the crush ribs, but Pettersson teaches this aspect of the invention (Fig. 6 and 3:12-36). In particular, Pettersson teaches fiberboard and wood (4:10-15). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Pettersson into that of Curtis in order to allow expansion and contraction of the composite board. Additionally, the combination can be interpreted to "define" the repository in that some glue would be present between the crush ribs of Pettersson (Fig. 6).

7. **Claims 2-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis (USPN 4615163) in view of Pettersson (USPN 4095913) and Zanini (USPN 2926729). Curtis teaches the well known aspects for making a composite profile, namely providing a core piece and insert, each having the same profile from end to end, wherein the core pieces defines a channel sized to receive the insert piece, the channel extending to both ends, inserting the insert piece downwardly into the channel with the top of the insert initially above the top surface of the core, and pressing the insert downwardly into the channel such that the surfaces of the insert and core are aligned (Figs. 3 and 4 and 3:40-4:40).

Curtis is silent to the crush rib and passing the core and insert assembly through an extrusion die to apply a coating.

Pettersson teaches the crush ribs (Fig. 6 and 3:12-36), and in particular teaches fiberboard and wood (4:10-15).

Zanini teaches passing a composite comprised of interlocking strips (2:45) through an extrusion die to apply a coating (Fig. 6).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Pettersson and Zanini into that of Curtis because doing so would have allowed expansion and contraction of the composite board (Pettersson) and masked the interface providing the desirable aesthetic aspect of a singular and unitary piece (Zanini). **As to Claim 3**, Zanini's material is a thermoplastic (2:10-15). **As to Claims 4 and 5**, Curtis clearly teaches that the shape of the insert "may be selectively varied." (4:2), and further teaches a configuration (Fig. 2) that reads on these claims. Zanini additionally teaches that it is desirable for the coating material to be provided "wedging within said slots" (1:50) and that this has the effect of "bonding the strips together." (1:46-47). Thus, Curtis provides clear teaching to the artisan to vary the particular shape of the insert and Zanini teaches that it is desirable to penetrate the gap to bond the strips together. **As to Claims 6-8**, Curtis clearly teaches the ordinary artisan to selectively vary the shape of the insert (4:2) and the groove to complement the insert (4:5-10), and further suggests that the ordinary artisan provide physical modifications of the groove to facilitate adhesion between the rod and groove surface (4:13-15) by providing notches or other elements that can effect greater adhesion between the beam and rod by keying the cured resin to the wood (core) and reducing the likelihood of shifting when the beam is placed under load. The particular width of gap, recessed shoulder, and widening would have

been prima facie obvious in view of Curtis' teaching to vary the profile of both the insert and the groove as provided above.

8. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis (USPN 4615163) in view of Pettersson (USPN 4095913) and Zanini (USPN 2926729), and further in view of Parasin (USPN 5165816) and Olofsson (WO 99/40273). Curtis, Pettersson, and Zanini teach the subject matter of Claims 2 and 4 above under 35 USC 103(a). **As to Claim 6**, in the event that Curtis' teachings are held not to be sufficient to render the claimed elements prima facie obvious, Parasin and Olofsson teach the claimed insert *configurations*, namely a channel wider at the top edge than the bottom (Parasin, Fig. 2, Olofsson Fig. 4, item 4). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Olofsson and Parasin into that of Curtis in order to provide recesses for adhesive and spaces to accommodate expansion and contraction, both aspects being desirable in beams. **As to Claim 8**, in the event that Curtis' teachings are held not to be sufficient to render the claimed elements prima facie obvious, Olofsson and Parasin teach the claimed insert *configurations*, namely a leg that widens adjacent the top surface of the core piece to define a gap (Olofsson, Figs. 3 and 4, item 4 and Parasin, Fig. 2, items 25, 44, 38). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Olofsson and Parasin into that of Curtis in order to provide recesses for adhesive and spaces to accommodate expansion and contraction, both aspects being desirable in beams.

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9. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis (USPN 4615163) in view of Pettersson (USPN 4095913) and Zanini (USPN 2926729), and further in view of Olofsson (WO 99/40273) and Del Rincon (USPN 5694730). Curtis, Pettersson, and Zanini teach the subject matter of Claim 2 above under 35 USC 103(a). In the event that Curtis' teachings are held not to be sufficient to render the claimed elements *prima facie* obvious, Olofsson and Del Rincon teach the claimed insert *configurations*, namely a recessed shoulder forming a gap between the core and insert (Olofsson, Fig. 4, item 4, portion at left is the core, and Del Rincon, grooves in insert of Fig. 3 are recessed shoulders). It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Olofsson and Del Rincon into that of Curtis in order to provide a recess for adhesive and to maximize the board retention of the insert (Del Rincon, 2:53).

10. **Claims 11-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis (USPN 4615163) in view of Pettersson (USPN 4095913) and Kalnin (USPN 5497595). As to Claim 11, Curtis teaches the well known aspects for making a composite profile, namely providing a core piece and insert(Figs. 2-4), each having top and bottom surfaces, a first and second ends (Figs. 1-4), wherein the core piece defines a channel sized to receive the insert piece (Figs. 2-4), pressing the insert piece into the channel (implicit) until the top surfaces of the insert and core are aligned (Fig. 3), wherein the channel defines at least one "leg" (areas beside the insert in Figs. 2-4), and the insert piece defines at least one side surface (Fig. 4), and applying adhesive to at least one of the leg and side surface (implicit).

Curtis is silent to the crush rib and “the step of applying adhesive along an opposite second end of said core piece so as to counter uneven expansion due to moisture absorption by said core piece from said adhesive.” The Examiner asserts that the countering of uneven expansion is an intended use or effect, and that this limitation is met by oppositely located cores, which would inherently or implicitly provide this effect.

Pettersson teaches the crush ribs (Fig. 6 and 3:12-36), and in particular, Pettersson teaches fiberboard and wood (4:10-15).

Kalinin teaches that it is conventional to provide inserts on both the top and bottom surfaces of a beam (Figs. 1 and 3).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Pettersson and Kalinin into that of Curtis in order to allow expansion and contraction of the composite board and to improve the stiffness and strength of the beam. **As to Claims 12**, a second channel and a second insert are conventional in the art, as taught by Kalinin. **As to Claim 13**, Curtis teaches that the core piece defines at least one shallow pocket to act as a repository for any extra adhesive applied (Figs. 2-8). In each Figure, Curtis’ insert “defines” the repository, but particularly in Figs. 5-8 the insert is interpreted as defining the repository in substantially the same way shown in this application.

Response to Arguments

11. No arguments are believed to be outstanding in this action reopening prosecution of the case.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450. The examiner can normally be reached on Monday - Friday, 8:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJD 5/31/06




CHRISTINA JOHNSON
PRIMARY EXAMINER
6/6/06